

Interagency Meeting – Gulf Oil Spill Workers’ Study

August 19, 2010

Participants: Terry Adirim, HRSA; Linda Birnbaum, NIH; Herbert Buxton, USGS; Francis Collins, NIH, Kate Corvese, DHS; Scott Deitchman, CDC; Peter Delany, SAMHSA; Agnes Donohue, DHHS; Spike Duzor, CMS; Stacy Elmer, DHHS; Sarah Field, OPHS; James Galloway, DHHS; Mary Gant, NIH; Dale Hitchcock, DHHS; Irene Hsu, DHHS; Harold Jaffe, CDC; Todd Jordan, OSHA; Lisa Kaplowitz, DHHS; Rachel Kaul, OASPR; Robin Kawazoe, NIH; Margaret Kitt, NIOSH; Lora Kutkat, NIH; Nicole Lurie, ASPR; Kerry Lyons, FWS; Teri Manolio, NIH; Scott Masten, NIH; Mike McGeehin, CDC; Aubrey Miller, NIH; Dalton Paxman, OPHS; John Piacentino, NIOSH; Larry Reiter, EPA; Jennifer Rusiecki, USCG; Juliana Sadovich, ACF; Dale Sandler, NIH; Erica Schwartz, USCG; R. Tom Sizemore, III, OASPR; Rosemary Sokas, OSHA; Nathaniel Stinson, Jr., NIH; Claudia Thompson, NIH; Farris Tuma, NIH; Shelby Walker, NOAA; Brenda Weis, NIH; Michael Zanker, DHS; Hal Zenick, EPA

*** An agency acronym list can be found in Appendix A. ***

Executive Summary

On August 19, 2010, NIH hosted an interagency meeting with several U.S. Federal Government agencies to gain a fuller understanding of efforts to respond to potential health effects of the Deepwater Horizon (DWH) disaster. A key area of discussion was DHHS’ design of a longitudinal follow-up study of oil spill clean-up workers; however, a broader goal was to share ideas on ways to maximize interagency efficiency and effectiveness by working collaboratively on areas of common interest. Participants discussed data and samples already collected by their agencies that could inform the study (e.g., worker exposure and environmental sampling); foreseeable data collection needs that could be met by the workers’ study rather than duplicate surveys to the same population; and agency resources that could be brought together to facilitate and improve the study and its research objectives (e.g., referral for health services).

The meeting began with a discussion of agencies’ current research, surveillance, and data collection efforts potentially relevant to the workers’ study.

- ACF: Dr. Juliana Sadovich described ACF’s mission as promoting economic and social well-being for families, children, and individuals in the community through a broad range of programs carried out by State, local, and tribal governments, and public and private sector organizations. Although ACF does not directly collect data or engage in research, it has considerable reach into states and social services organizations and their data collection. In particular, ACF can facilitate through their State contacts referrals for services between social services providers in the Gulf region. They view the study as an opportunity to study workers responding to disaster and its impact on families and children.
- NIOSH: Dr. Margaret Kitt updated participants on NIOSH’s rostering, health hazard evaluations (HHEs), and other activities. Of the 52,000 rostered workers, over half have been entered into the database. Of those currently entered, 19 percent are female, nine percent are Latino, and two percent are Asian—likely an under-representation due to low literacy in this specific Vietnamese population and inability to understand roster instructions. BP asked NIOSH to conduct HHEs off-shore (at the source, and during burn events, dispersant application, booming, and skimming) and on-shore (vessel and equipment decontamination, beach cleanup, wildlife rehab, and waste management). Health surveillance activities involved analyzing data from BP/Unified Area Command (e.g., illness and injury data), medic logs, HHE health symptom surveys, and information from States and Poison Control Centers. NIOSH is also undertaking animal toxicity studies of oil, dispersant, and combinations thereof. The agency has already begun collaborating with NIH by allowing use of the roster for study recruitment.
- CDC: Dr. Scott Deitchman discussed CDC’s review of State and hospital data. He mentioned that Poison Control Center calls have declined since July, and State surveillance is unlikely to continue through the workers’ study without funding. Ongoing

surveillance, however, may be achieved by a new behavioral health surveillance system for Gulf states¹ or the Behavioral Risk Factor Surveillance System² (BRFSS). Although extant BRFSS data may suggest that rates of some behavioral health issues were elevated after the disaster, it was unclear whether the data covered the complete, affected area, and there was insufficient time to review the data in the context of comparison groups. SAMHSA will provide first-year support for the new/modified system with \$3 million in BP funds. CDC will begin a planning process for the system and will work with NIH, SAMHSA, HRSA, and ACF but welcomes other agencies' input. CDC hopes to begin calling affected areas using this new system in six weeks. However, after hearing about the number of minorities in the region, meeting participants inquired about reaching those without landline phones, stating that many on the NIOSH roster had only cell phone numbers listed. Meeting participants indicated that use of cell phones may not be optimal either since some individuals try to conserve their minutes.

- HRSA: Dr. Terry Adirim explained that HRSA provides underserved communities with access to health care through states, health centers, the National Health Services Corps, poison control centers, and a maternal and child health bureau. HRSA does not conduct surveillance or disaster response, but their health centers and practitioners do. Gulf-area resources include a grant to increase access points for care and reportable illnesses, and grants to federally qualified health centers to integrate behavioral health into primary care. With funding, HRSA can provide more training, detection, surveillance, prevention, and treatment through its practitioners. HRSA can also leverage grantee and community health resources for referrals arising from the workers' study. They are interested in receiving information from the study that could help underserved communities.
- National Incident Command: Dr. James Galloway stated that the spill has affected the Gulf's economy, environment, community, and individual health and behavior. Regional concerns touch on each of these, particularly the claims process, loss of livelihood, lifestyle, and dissolution of family when members leave to find jobs. People in the affected area are worried about cancer and neurologic, gastrointestinal, respiratory, and other diseases but expect that the government will "make it right" by finding and treating them. Communities are also skeptical about government transparency and perceived lack of oversight. There are also concerns about the level of engagement between BP and the Federal Government, effects of dispersants and subsurface oil, perceived unfairness of the Vessels of Opportunity program, and the process for making and reviewing claims. He mentioned that ten Regional Health Administrators (RHAs) are situated throughout the country and have been charged with recovery responsibilities, with Regions IV and VI in the Gulf taking the lead. When asked how residents might respond to the study, Dr. Galloway stated they would likely be receptive if they view it as a venue for ensuring their long-term health.
- SAMHSA: Dr. Peter Delany announced that an agreement had been reached between BP and SAMHSA where BP will provide SAMHSA with a \$10 million conditional gift to implement a national disaster behavioral health hotline network; comprehensive public health education and information messaging; and a broad surveillance system for tracking behavioral health needs and services. The surveillance funds will support behavioral health tracking in the Gulf. These funds will support: the BRFSS-like system, SAMHSA Emergency Services Grants, expansion of sampling in the National Survey on Drug Use and Health (NSDUH), and two staff to work with local and State coordinators to examine local data, including out of home placements related to substance abuse and mental health, DWU/DWI arrests, and domestic violence to track indicators that help better understand the overall impact.
- EPA: Dr. Hal Zenick stated that EPA has conducted extensive air monitoring, and is comparing water and sediment sampling with baseline and early spill ecological data from the national coastal conditions assessment. Water and sediment are tested for a range of pollutants and some of the constituents of dispersants, and they will continue their studies because many questions remain unanswered. Use of these data in reconstructing exposure may be somewhat limited if derived from fixed site monitors, as they are set up for compliance rather than research. The additional monitoring that has been carried out will provide a more complete data set for researchers to draw upon. EPA is also interested in collaborating with NIH's National Toxicology Program to improve understanding of oil and dispersant health effects. The battery of mammalian cell line assays

¹ Note that Texas participation in surveillance is undecided since impact from the spill is reportedly minimal.

² The BRFSS is an ongoing, telephone (landline) health survey that tracks State-specific health conditions and risk behaviors.

EPA conducted addressed multiple mechanisms of adverse effects of human health and did not reveal any significant biological activity for any of the eight dispersants evaluated. Meeting participants asked whether support for studying non-worker cohorts would be diminished—a matter that will require careful communication. Meeting participants also agreed it's important to convey that the long-term health effects of spill-related chemicals warrant study even though the potential for short-term acute conditions seems lessened.

- FWS: Mr. Kerry Lyons stated that FWS' response to the spill involved approximately 800 responders working in wildlife recovery, shoreline cleanup, and natural resource damage assessment. In May and June, industrial hygienists conducted occupational exposure sampling. Tests included direct reads for volatile organic compounds, temperature, humidity, carbon dioxide and carbon monoxide, and personal breathing zone sampling for benzene, ethyl benzene, petroleum distillates, toluene, xylenes, and volatile organic compounds. Around 99.8 percent of tests were found to be below detectable limits. Teams are also studying long-term effects on waterfowl and wildlife, agreeing that compounds in the area or animals now may not resemble those after weathering, bioconcentration, degradation, and after build up in top predators. FWS can make their data available, and the agency is interested in information about short- and long-term effects of the spill.
- OSHA: Mr. Todd Jordan stated that OSHA's main response activities involved making sure workers had proper training and protection to avoid illness or injury. OSHA has conducted over 3,000 interventions in staging and other work areas to monitor BP's efforts to protect workers and raise issues through the unified command to ensure BP proactively protected worker safety and health. OSHA developed an industrial hygiene sampling plan to assess chemical and physical (e.g., equipment and heat) exposure in onshore, near-shore, and offshore areas. They have several thousand sample results, individual data on hundreds of workers, and results from chemical and other tests pertaining to exposure for work activities. This information could help reconstruct and validate the exposure matrix and allow NIH to follow specific subsets of workers. OSHA will share its data, subject to resolving individual identifiers. OSHA is interested in the results of health outcomes studies, in particular as they might inform decisions about use of respiratory protection and other forms of personal protective equipment.
- NOAA: Dr. Shelby Walker described NOAA's response to the oil spill, which included assessing the extent of oil in the environment, dispersant distribution, oil/dispersant degradation, natural resource damage assessment activities, seafood safety, and closing/opening federal waters for fisheries. Many NOAA vessels and personnel have been in or around areas of surface oil, dispersant application, and *in situ* burning. Air sampling has also occurred within the region of the wellhead, involving an aircraft outfitted for chemical analysis that showed certain air quality measures (e.g., aromatics) as being higher than the Los Angeles region. The agency is conducting additional air chemistry and has had modelers working on atmospheric trajectory maps. Geospatially-referenced data are available on the NOAA Web page and geoplatform.gov.
- USCG: Drs. Erica Schwartz and Jennifer Rusiecki reported that USCG deployed thousands of personnel to the Gulf, a significant percentage of whom were enumerated prior to exposure using the USCG Mobilization Readiness Tracking Tool (MRTT). USCG is a healthy worker population because all active duty and reserve members are required to have an annual periodic health assessment (PHA). The PHA provides medical readiness and health screenings to ensure military members are healthy and ready to deploy. USCG also has an Occupational Medical Surveillance and Evaluation Program that requires mandatory examinations and surveillance for USCG personnel who are in pre-identified high risk groups (e.g. Resident Inspectors, Pollution Investigators, Marine Safety, Port Safety, Vessel Inspectors, Marine Investigators, and/or Fire-Fighters). Additionally, USCG personnel deployed to DWH are required to complete an exposure form if they believe they have had an exposure. Each exposure form is evaluated by a cognizant safety and environmental health officer. Additionally, USCG personnel must complete the USCG DWH Inventory Tool after their deployment. This tool addresses demographics, deployment period, worksite, activities, exposures, injuries, symptoms and use of personal protective equipment. Responder baseline data and some sera are available. USCG worked with OSHA on environmental and personnel sampling, which includes over 300 personal air samples tested for 11 compounds. A suggestion for the NIH workers' study is to consolidate surveys because workers have completed several already. USCG could encourage its workers to join the NIH study and find ways to transfer already collected data to avoid duplication. USCG is interested in identifying similar exposure groups in other datasets.

- USGS: Mr. Herb Buxton described that USGS' response involved their natural resources damage assessment relating to birds, marine mammals, deep water habitats, corals, and subtidal and shoreline habitats, as well as activities to characterize various weathering stages of the oil and dispersants. They gathered baseline (pre-impact) samples from 70 locations (with GIS details) but have not as yet collected impact samples. USGS uses AVIRIS, Airborne Visual and Infrared Imaging Spectrometry, as a mapping tool to identify the extent of oil in the ocean, near shore and coastal settings, and to help estimate oil flow balance, and to ascertain proportions of oil that have dissolved in the water column and the extent of degradation. Fingerprinting data will be published and will be shared with NIH. USGS is interested in obtaining samples of affected seawater, oil emulsion, and coastal sediments from locations representative of different transport times and stages of weathering. The environmental samples will be tested using their current laboratory methodologies.

*** A table summarizing details about each agency's data collections, needs, and collaboration recommendations can be found in Appendix B. ***

Dr. Nicole Lurie noted that many different groups hold numerous expectations about what will and won't be found in these studies, emphasizing the need for the science to be completely objective and unbiased. She also noted that the workers' study is not the only study underway or planned in response to the disaster. We need to communicate how the workers' study fits into other anticipated or desired research efforts related to the many other populations and concerns in the Gulf. This effort may be unusual in that initial effects appear to be more behavioral and stress related than in other disasters, and how well the emergency is managed can have a tremendous impact on the severity of these initial effects.

Participants next heard from Dr. Dale Sandler from NIH's National Institute of Environmental Health Sciences (NIEHS) on the Gulf Longitudinal Follow-up (GuLF) Worker Study. This study was designed as part of CDC and NIH's charge to coordinate and lead DHHS's human research and surveillance response to the oil spill. The workers' study is a longitudinal cohort of Gulf oil spill workers³ with a comparison group and a nested sub-cohort involving additional specimen and data collection.

- Researchers will administer a telephone enrollment questionnaire to approximately 70,000 workers and controls to collect information on health, lifestyle, occupation, socioeconomic factors, demographics, cleanup activities, living conditions on-site, and symptoms attributed to the spill (e.g., depression, stress, anxiety). NIH anticipates a 70-75 percent response rate, resulting in 50,000 study participants. They hope to oversample for those with highest exposure and those who held jobs requiring only a few workers, and to restrict the study to people whose work experience was within 9-12 months from the study start date.
- These 50,000 individuals would be divided into two subgroups: 25,000 in the Active Follow-up Cohort and 25,000 in the Passive Follow-up Cohort. The Active Cohort would involve 20,000 clean-up workers and 5,000 unexposed controls (and would include a nested biomedical surveillance sub-cohort). The Active Cohort involves a home visit to administer additional questionnaires, collect biospecimens, take environmental samples, and take physiologic and anthropometric measures.
- The Biomedical Surveillance Sub-cohort of 5,000 clean-up workers will include additional collection of biological and environmental samples, comprehensive pulmonary function testing, neurological and neurobehavioral testing, and additional mental health screening. Biological samples will include blood, urine, hair, saliva, and toenails. Hair and toenails will indicate cumulative exposures occurring over several months, and DNA will be extracted from blood or saliva. Samples will be tested for immunologic, renal, and liver function, cytogenetic changes, and DNA damage. An open question is whether to obtain fresh blood to test for hematological changes that have been associated with benzene exposure⁴ and getting a Complete Blood Count (CBC) and Differential Blood Count. Doing so will increase costs, and it is unclear how specific these measures will be. An alternative is to perform this assay for informative subgroups only.

³ A "worker" is defined broadly as someone who worked one or more days in any cleanup activity, whether paid or a volunteer.

⁴ The Chinese Benzene Cohort, for example, found evidence of hematologic changes as well as chromosomal damage at low benzene levels. These outcome measures may be relevant for other compounds such as polycyclic aromatic hydrocarbons.

- The Passive Cohort comprising the remaining 25,000 individuals would not involve specimen collection or testing. Follow-up would include annual newsletter updates, passive surveillance of mortality and cancer registries, and tracking by linkage to cancer registries, CMS data, and other databases if possible.
- NIH hopes to enroll the 50,000 participants in a 6-9 month period, starting in October. The research will be enhanced by seeking community input on study development, health outcomes, and recruitment strategies and materials, and engaging a Community Advisory group. Much of the work will be carried out by field staff and researchers in the affected region who are familiar with recruitment challenges, health issues, and referral networks. Researchers will also roll out the study in phases to allow for course corrections as needed. Due to specific cultural and language issues relating to Vietnamese fishermen and other special populations, NIH will work with local organizations to facilitate recruitment of these individuals.
- NIH is working on a data sharing plan that protects study participants' privacy but allows controlled access to data for follow-on studies. Study participants will be asked to provide their consent for data sharing (and the study more generally), but plans to share data may diminish participation unless goals and protections are clearly communicated. NIH plans to post summary data on a Web site once they are available. NIH will also obtain a Certificate of Confidentiality to protect data from compelled release to the extent possible.

Dr. Sandler also addressed known study limitations that incidentally arose during the morning, specifically the comparison group and developing the exposure matrix.

- Comparison Group: There is no ideal comparison group, but if one did exist, it would probably be unexposed community members. An alternative is to use those who were trained for cleanup but did not actually work. While this group will reflect the baseline health problems in the region, it isn't entirely unexposed to the environment and stress created by the spill. Something to review carefully is the reason trained people didn't work. If there was not enough work and selection was unrelated to health or exposure status, this group is appropriate; however, if people were turned away due to health concerns, a more extensive review is needed. Including workers from outside the region was also discussed (25 percent of people on the NIOSH roster reside outside the Gulf), but they differ sociodemographically from people nearby, so this adds complexity and cost to the study. Another consideration is whether to compare the Gulf workers against a typical worker cohort, but this is not a typical worker cohort because people in the local area have underlying issues related to limited access to health care and community lifestyle.
- Exposure Reconstruction: There are no quantitative exposure measures for chemicals, so NIH will "reconstruct" workers' exposure by analyzing qualitative and quantitative information from OSHA, NIOSH, EPA, USCG, BP, and other sources mentioned today; biospecimens; GIS data; weather; residential proximity to the spill; and fishing practices. The study will also draw on available exposure measurements and experimental data. The goal is to create an after-the-fact job exposure "matrix" that's as quantitative as possible. One approach is to use the type of exposure (e.g., crude oil, burning oil, weathered oil) along with proximity, duration, and other data to attribute an exposure category to certain jobs.

Following Dr. Sandler's presentation, meeting participants provided input on the study, and Dr. Teri Manolio provided input received on the study to date, along with plans for further consultation and discussion.

- Outcome measures: SAMHSA encouraged the workers' study to include behavioral health (e.g., tobacco and alcohol use) questions, offering to work with NIH to address sensitivities about this data. They also recommended testing for illicit substances, but there was concern over that possibly discouraging participation and affecting data reliability since some substances clear quickly from the system. One participant mentioned attempting to understand how disasters affect the family unit and trying to gather data on perceived stress, as that may affect physical health. To incorporate questions like these, NIH is consulting the NHANES survey for relevant questions on health status, and they're hoping to add other validated survey questions. SAMHSA offered to send questions to address behavioral health; another participant suggested looking at the Social Vulnerability Index tool.

- Returning results to study participants, referrals: CDC asked whether the study would return results to study participants and agreed that they'll need to approach this matter in several ways, and work with SAMHSA and other agencies that have done this in the past. An area of agreement among all meeting participants is the need to be prepared to refer individuals for services, but related decisions are to determine which results are returned and who is referred. Dr. Manolio echoed that communicating results has been encouraged, but a plan must be developed to ensure the approach is appropriate. Researchers will work with local resources to put a referral plan in place. For mental health services, BP has provided funds to supplement mental health capacity in the area. In the meantime, DHHS has been working through HRSA and other resources (e.g., mobile clinics) to support the area. A central concern is that the community will feel studied, but not helped, by this research. One way of addressing this is to provide continual feedback to the community, and ask for regular input through community meetings and small groups (not simply through press releases and Web sites).
- Community involvement: Possibly the biggest concern has been local involvement. Many uncertainties about the study may be resolved by involving the community, universities, and agencies/organizations with established area connections. Several agencies and groups (HRSA, SAMHSA, ACF, RHAs) are working with providers in the Gulf to coordinate services, so mechanisms are in place to draw on resources in the area. Having the community embrace the study, understand what it can and cannot offer, and involving the correct cultural resources, will be crucial for recruitment and follow-up. In addition, one reason NIOSH was successful in rostering workers is because the Unified Area Command endorsed the effort. Dr. Manolio mentioned that the IOM meetings would also provide a forum for continuing discussions. Webinars, phone conferences with state health officials, and other ways to obtain community consultation have already begun. In addition, local universities have formed a consortium to begin addressing research questions; NIH expects a funding opportunity to be announced in mid-October to solicit additional research in the Gulf area.
- Exposure group: A possible source for study participants—ones with considerable exposure—are workers at source control, consisting of approximately 30 vessels near the ruptured well. These workers, thought to be BP employees or contractors, stay on ships 24/7, so their exposure will be different from those of the average worker. This may be one population where more in-depth testing (e.g., spirometry and bronchodilators) could be used. USCG will also provide NIH with information on National Guard responders. Dr. Manolio conveyed a recommendation from the June IOM meeting: meet with a group of highly exposed workers to identify acute health issues they might be experiencing. NIH was further advised not to develop exposure categories based purely on job title, recognizing that a range of exposure exists within each category.
- Federal forum for continued coordination: Participants suggested that the study could benefit from continued input from agencies involved in the response, namely EPA, CDC's Agency for Toxic Substances and Disease Registry, state health officials, RHAs from Region IV (includes Florida, Alabama, and Mississippi) and VI (includes Louisiana and Texas). For example, Regions IV and VI are planning to convene in September, and many of the players mentioned will attend this event. Dr. Manolio added that a unified plan for coordinating research among the agencies and Gulf universities is needed to make sure people in the area aren't asked to participate in a new study every week.
- Preparing for the next disaster: Participants agreed that these efforts should be used as a framework for developing a longer-term plan on the kinds of data, samples, IT requirements, collaborations, and other details needed to respond to, and learn from, future disasters. A good example of how advanced planning has shown promise is that workers were rostered and trained more quickly and comprehensively in this spill than in past events partially due to ongoing work being conducted by an interagency working group that includes NIOSH, NIEHS, OSHA, and USCG.
- Linking datasets and results: Dr. Manolio mentioned another suggestion, brought up before and during this meeting, was to link biomonitoring studies with environmental sampling data provided by other agencies. Several meeting participants mentioned that linking together datasets from all the research would yield an extremely valuable and powerful resource; the Multi-Agency Collaboration Environment (MACE) may serve as a model for this purpose. DHS developed MACE, a demonstration project to link data from multiple agencies. Another valuable resource would be a clearinghouse for information coming out of the Gulf.

Following the group discussion, Dr. Manolio summarized agencies' available data and resources and potential for sharing data as captured in Appendix B. She also summarized needs for collaboration across agencies as comprising five key areas:

- Development and implementation of comparable or identical surveys;
- Validation of behavioral measures and other specialized measures;
- Avoidance of duplications, redundancy, and over-burdening the Gulf population;
- Harmonization of existing data and surveys; and
- Identification and joint characterization of shared comparison groups.

Efforts that could enhance responses to future disasters include:

- Improve information technology for accessing and sharing data rapidly
- Improve response to media hype and community fears
- Develop a plan for implementing surveys and taking samples immediately, including pre-exposure where possible
- Develop a prospective plan for the science of public health emergencies
- Mobilize “science” team at outset of such emergencies
- Develop prevention science for behavioral health effects of emergencies, need to do better for next emergency

Next steps arising from these discussions include:

- Develop broader messages describing entire DWH research and surveillance program
- Identify breadth of relevant, ongoing research throughout federal agencies—initial reports are incomplete due to rushed timeframe of meeting
- Develop single clearinghouse for all DWH-related data from all agencies (MACE, data.gov, restorethegulf.gov, NIH's National Library of Medicine)
- Reconvene this group in roughly one month, possibly in conjunction with September 22 IOM meeting, and the perhaps at 6 month intervals thereafter
- Establish/continue working groups in survey development (particularly expanded BRFSS), exposure assessment, data harmonization, referrals for care
- SAMHSA to share behavioral survey instrument with NIEHS
- NIMH to share mental health “rescue” protocols with NIEHS
- Consider interacting with the American Petroleum Institute to coordinate research efforts
- Consider presenting the study and referral plans at the Association of State and Territorial Health Officers (ASTHO) meeting in Colorado in October
- Consider including a Region IV meeting with the Tampa IOM gathering in September

Drs. Collins and Lurie thanked participants for a historic and information-rich meeting and adjourned the meeting.

Appendix A. Acronym List

ACF: Administration for Children and Families, DHHS

ASH: Assistant Secretary for Health, DHHS

ASPR: Assistant Secretary for Preparedness and Response, DHHS

CDC: Centers for Disease Control and Prevention, DHHS

CMS: Centers for Medicare & Medicaid Services, DHHS

DHHS: Department of Health and Human Services

DHS: Department of Homeland Security

DOC: Department of Commerce

DOI: Department of the Interior

DOL: Department of Labor

EPA: Environmental Protection Agency

FWS: U.S. Fish and Wildlife Service, DOI

HRSA: Health Resources and Services Administration, DHHS

NIEHS: National Institute of Environmental Health Sciences, NIH, DHHS

NIH: National Institutes of Health, DHHS

NIMH: National Institute on Mental Health, NIH, DHHS

NIOSH: National Institute for Occupational Safety and Health, CDC

NOAA: National Oceanic and Atmospheric Association, DOC

OASPR: Office of the Assistant Secretary for Preparedness and Response, DHHS

OPHS: Office of Public Health and Science, DHHS

OSHA: Occupational Safety and Health Administration, DOL

SAMHSA: Substance Abuse and Mental Health Services Administration, DHHS

USCG: United States Coast Guard, DHS

USGS: United States Geological Survey, DOI

Appendix B. Quick Reference to Existing Agency Data, Data and Collaboration Interests, and Resources

Agency	Existing Data	Data Needs	Collaboration Interests	Resources
ACF	Connections with grantees and states	Data to help children and families	Referrals for treatment	Help in providing referrals to State health departments
ASH			RHAs to facilitate communications among state health officers, others	Local RHAs to work with communities
CDC			Planning process for new/modified behavioral health surveillance system	
EPA	Extensive air, water, and sediment data posted publicly (http://www.epa.gov/bpspill/). Also, some pre-spill data from National Coastal Conditions Survey that may provide baselines		Ongoing discussions/data sharing with a number of sister agencies	
FWS	Wildlife, area samples and data; possibly some of same individuals in workers' study	Broad interests in any data; short- and long-term effects of the spill		
HRSA	Connections with providers, health centers	Behavioral health issues, other information to target care; help underserved communities.	Provide training, detection, surveillance, prevention, and treatment through health care practitioners' network; facilitate collaboration, leverage grantee resources and the National Association of Community Health Centers	Local HRSA offices to work with communities
NIOSH	Roster, exposure data, survey instrument			
NOAA	Air sampling/chemistry results, geospatial information, possibly some of same individuals in workers' study			
OSHA	Individual-level exposure data, possibly some of same individuals in workers' study		Data sharing: Individual-level exposure data as indicators	
SAMHSA	Pre-spill NSDUH survey results; contacts for Assoc. of State and Territorial Health Officers		Study design: comparable surveys; SAMHSA to provide questions to NIH	Mental health referral network since Katrina organized between SAMHSA and States
USCG	MRTT, baseline pre-exposure exams/sera, other health exams, inventory, possibly some of same individuals in workers' study	Interest in identifying similar exposure groups	Data sharing: Inventory Tool and Mobilization Readiness Tracking Tool, link to individual reporting to avoid duplicate surveys; area and personal sampling	
USGS	Pre-spill ecologic and wildlife samples, "fingerprint" and other data	Post-spill environmental samples from locations representative of different transport times and stages of weathering	Data sharing: Provide to USGS post-spill environmental samples for analysis of oil and dispersant weathering and degradation byproducts.	
General	Census, American Community Survey		Validation of behavioral, other specialized measures; avoid duplications and redundancy, over burdening; identify shared comparison groups and characterize jointly; harmonize existing data to avoid duplication	

Abbreviations: MRTT = Mobilization Readiness Tracking Tool; NSDUH = National Survey on Drug Use and Health; RHAs = Regional Health Administrators